

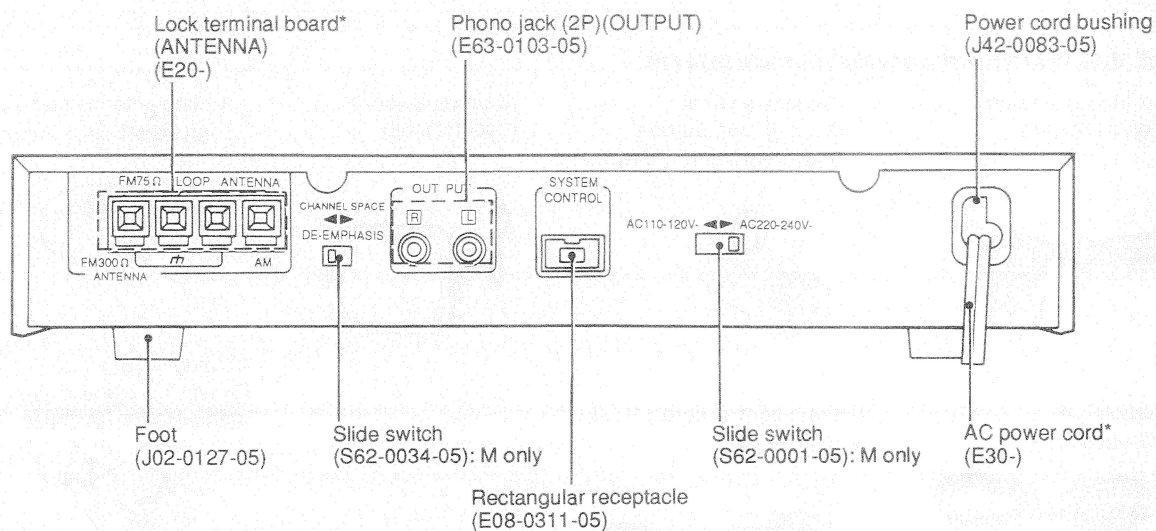
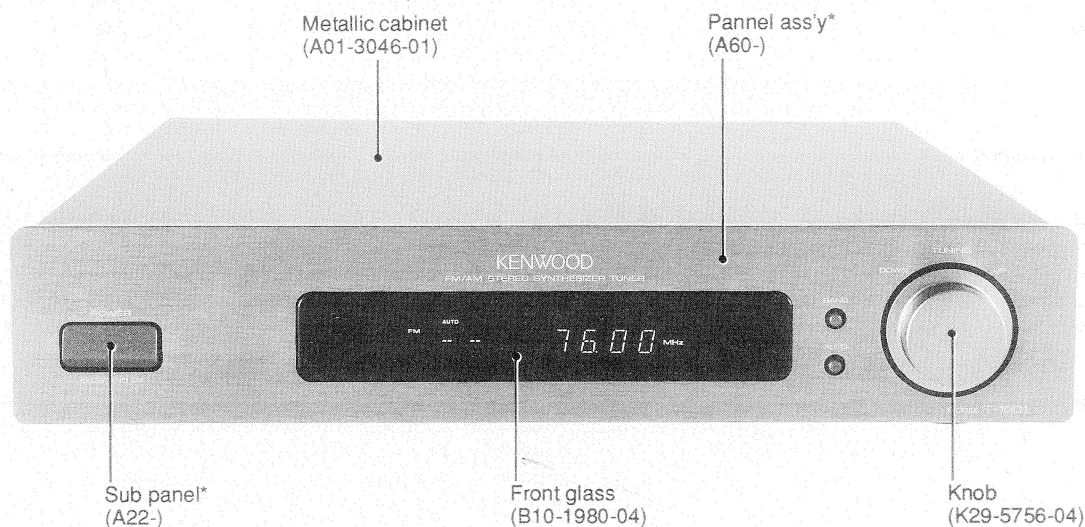
FM/AM STEREO SYNTHESIZER TUNER

# T-1001/L

## SERVICE MANUAL

# KENWOOD

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B51-4759-00 (S) 2335



\* Refer to parts list on page 28.

# T-1001/L

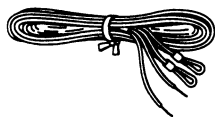
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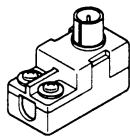
### Accessories

**Check that the following accessories are present.**

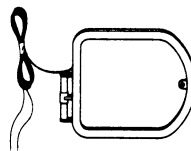
FM indoor antenna ..... 1  
(T90-0176-05)



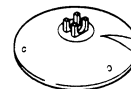
Antenna adaptor ..... 1  
(For U.K. and Europe)  
(T90-0185-05): E, T ONLY



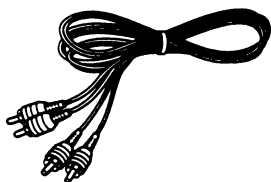
AM loop antenna ..... 1  
(T90-0173-05)



Loop antenna stand ..... 1  
(J19-2815-04)



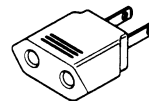
Audio cord ..... 1  
(E30-2600-05)



System control cord ..... 1  
(E30-2628-05)



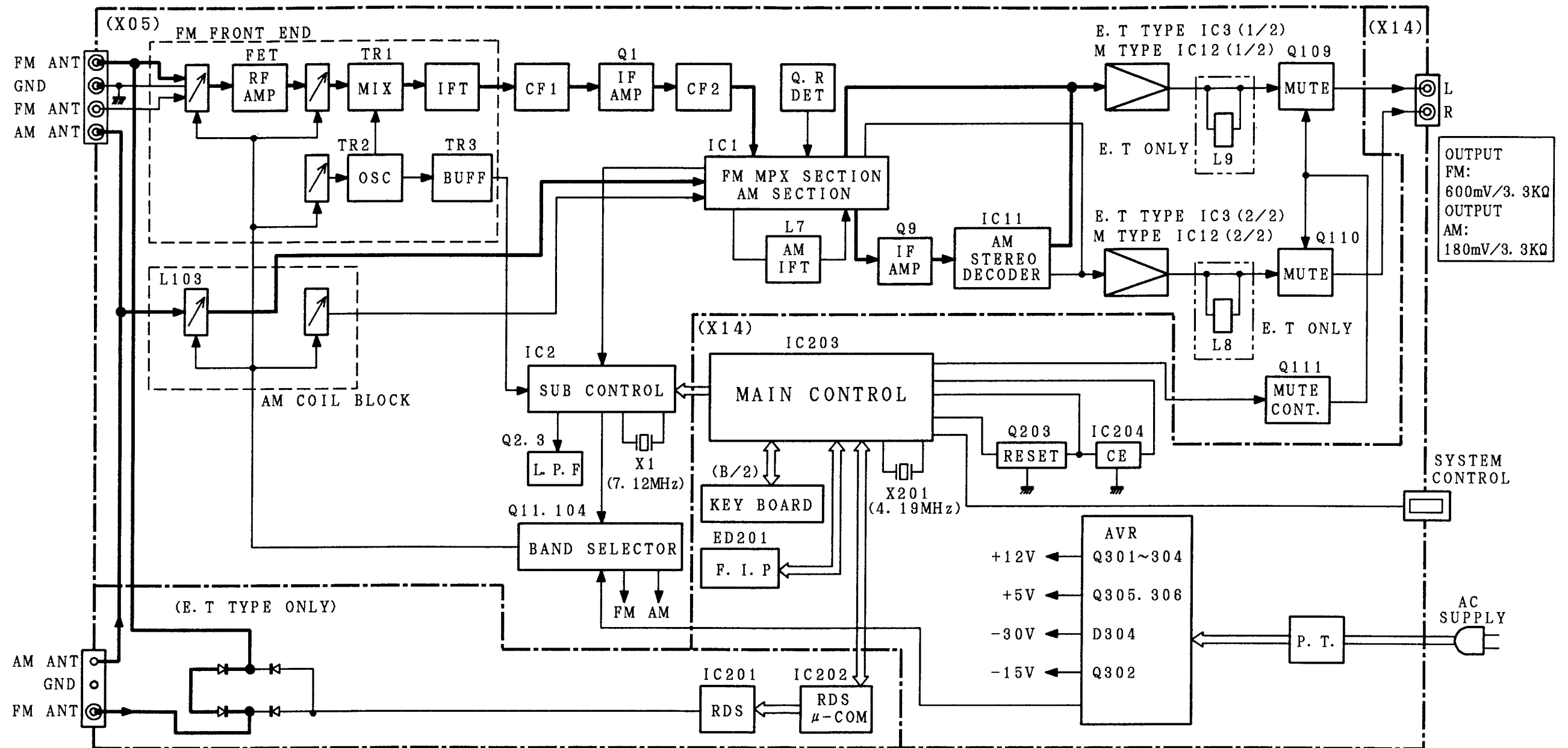
AC plug adaptor ..... 1  
(Except for some areas)  
(E03-0115-05): M ONLY



For the unit with a European AC  
plug in areas other than Europe

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## BLOCK LEVEL DIAGRAM



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CIRCUIT DESCRIPTION

TUNER  $\mu$ -Com:  $\mu$ PD78043GF-039 (X14: IC203)

1. Function Description

- 20 ch random preset.
- Synchronization control with IF COUNT.
- RDS function (E,T TYPE only).
- AM STEREO compatible.

2. Controlled Units

- (1) PLL IC  
LC7218
- (2) RDS synchronizing microcomputer (E TYPE only).  
LC6543H-4600
- (3) Fluorescent display tube (9 grid/16 segment)  
→ Dynamic drive via microcomputer.  
CM1224C

3. Destination

Destination	Diode SW					Band	Receive frequency range	Inter channel space	IF	RF
	4	3	2	1	0					
J	*	*	*	*	0	FM	76.0 MHz - 90.0 MHz	100 kHz	-10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
K1	*	*	1	0	1	FM	87.5 MHz - 108.0 MHz	100 kHz	+10.7 MHz	25 kHz
						AM	530 kHz - 1610 kHz	10 kHz	+450 kHz	10 kHz
K2	*	*	0	0	1	FM	87.5 MHz - 108.0 MHz	100 kHz	+10.7 MHz	25 kHz
						AM	530 kHz - 1700 kHz	10 kHz	+450 kHz	10 kHz
E1	0	0	*	1	1	FM	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
E1'	1	0	*	1	1	FM RDS	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
E2	0	1	*	1	1	FM	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
						LW	153 kHz - 279 kHz	9 kHz	+450 kHz	9 kHz
E2'	1	1	*	1	1	FM RDS	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
						LW	153 kHz - 279 kHz	9 kHz	+450 kHz	9 kHz

- Diode SW 0 → 0: J TYPE  
1: K, E TYPE
- Diode SW 1 → Inter channel space  
0: FM 100 kHz/step, AM 10 kHz/step  
1: FM 50 kHz/step, AM 9 kHz/step
- Diode SW 2 → AM band range (K type only)  
0: AM WIDE  
1: AM NARROW

- Diode SW 3 → Select LW model or not.(E type only)  
0: Without LW  
1: With LW
- Diode SW 4 → Select RDS model or not.(E type only)  
0: Without RDS  
1: With RDS

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CIRCUIT DESCRIPTION

1. Test Mode

1.1 Test Mode with the Main Unit Keys

- (1) Setting Procedure
  - While pressing the DOWN key, connect the AC outlet.
- (2) Cancellation
  - When the AC outlet is disconnected, the initial setting will take effect and the test mode will be concealed.
- (3) Description
  - 3-1 Auto POWER ON
    - When the AC outlet is connected while the DOWN key is pressed, the POWER will turn ON and all functions will be at the initial setting.
  - 3-2 ALL LED ON Mode
    - When the AC outlet is connected while the DOWN key is pressed, all LEDs will light. Any key operation on the main unit thereafter will return the LEDs to normal.

3-3 Main Unit Key Validity Check

- Whether the main unit's keys are operable (valid) can be checked. Regarding the keys whose display does not change when they are used, their display will be made to change.

3-4 Remote controller operation check with the main unit

- Use the SHUTTLE KEY UP/DOWN to adjust P.ch UP/DOWN.

3-5 MUTE signal output

- The MUTE signal is not output.

1.2 Test Mode With Serial Communications

(1) Setting Procedure

- For 16-bit serial communications, connect the AC outlet and enter the TEST ON code (0C2FFH).
- The serial test code can be received even within 1 second of POWER ON/OFF.

(2) Cancellation

- For 16-bit serial communications, enter the TEST OFF code (0C2FEH) or disconnect the AC outlet.

(3) Description

- 1. Other operations during the test mode (serial communications)
  - During the test mode (serial communications), the main unit's keys, remote controller keys, and normal serial code will be ineffective.
- 2. Required operations for the test mode (serial communications).
  - The serial code for the test mode (serial communications) can be used to check the operation of all circuits. Refer to the test mode serial code table.
  - The code entered during the test mode (serial communications) will be effective regardless of the display mode.
  - The following functions are available in the test mode (serial communications):

0 to 9, +10  
AUTO (AUTO ST./MONO)  
MEMORY (ENTER)  
UP/DOWN (MANUAL SCAN unnecessary)

- When a PRESET CH is called up and the SD detection prevention timer ends, a specific serial code will be output. The code will be output when the IF COUNT is executed and the IF COUNT is OK.
- During the test mode (serial communications), the MUTE signal is not output. This is for reducing the input-output switching time during the measurement.
- When a valid serial code for the test mode is received, the code identical to the code entered will be output.
- For checking the MUTE operation, MUTE has a special code.

TUNER MUTE

- To switch cyclically, enter the individual serial code. For example for AUTO STEREO/MONO, enter the two codes for AUTO STEREO and MONO.
- All the FL and LEDs will light. To cancel, enter the cancellation code. The LEDs will then return to normal.
- All functions (including test mode) will be initialized.

## CIRCUIT DESCRIPTION

### 1.3 Initial Settings

#### (1) Setting Procedure

- If the unit has a backup function, hold down the BAND KEY and connect the AC outlet. This will obtain the initial settings.
- During the test mode set with main unit's keys and the test mode with serial communications, the initial settings can be obtained by disconnecting and reconnecting the AC outlet.

#### (2) Description

- All function (including test mode) will be initialized.
- The manufacturer's memory is always set in the preset CH and area.

### 1.4 POWER ON Startup

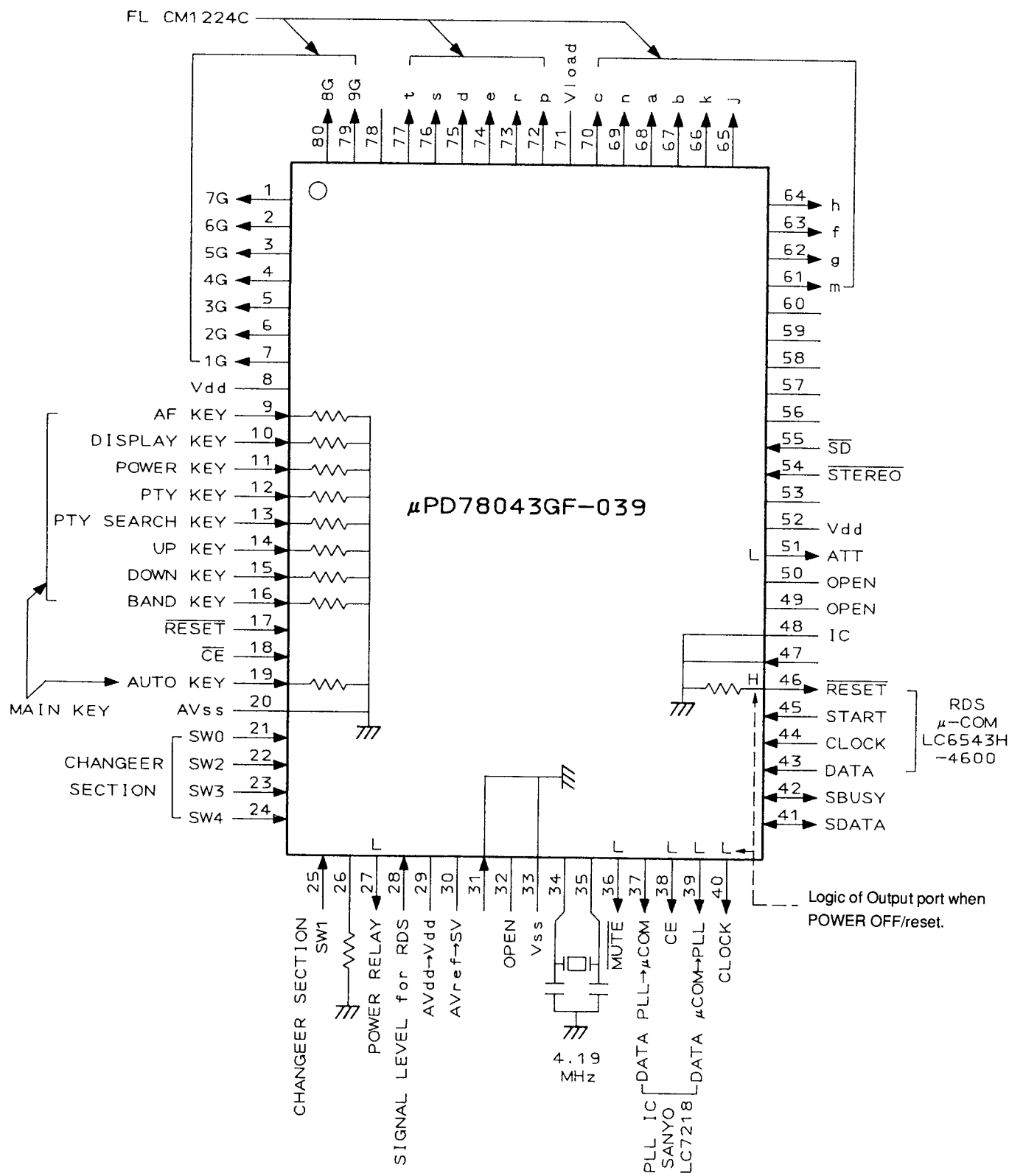
- Since the unit has a POWER key, no setting is required.

#### Test Frequency

CH \ Type	J Type	K Type		E Type	
	Without TV	Narrow	Wide	With LW	Without LW
1	FM 76.0 MHz	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz
2	FM 78.0 MHz	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz
3	FM 83.5 MHz	AM 630 kHz	AM 630 kHz	AM 630 kHz	AM 630 kHz
4	FM 88.0 MHz	AM 990 kHz	AM 990 kHz	AM 990 kHz	AM 990 kHz
5	FM 90.0 MHz	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz
6	AM 531 kHz	AM 1610 kHz	AM 1610 kHz	AM 1602 kHz	AM 1602 kHz
7	AM 630 kHz	FM 87.5 MHz	AM 1700 kHz	LW 162 kHz	FM 87.5 MHz
8	AM 990 kHz	FM 87.5 MHz	FM 87.5 MHz	LW 216 kHz	FM 87.5 MHz
9	AM 1440 kHz	FM 87.5 MHz	FM 87.5 MHz	LW 270 kHz	FM 87.5 MHz
10	AM 1602 kHz	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz
11	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	LW 279 kHz	FM 87.5 MHz
12	FM 76.0 MHz	FM 90.0 MHz	FM 90.0 MHz	FM 90.0 MHz	FM 90.0 MHz
13	FM 76.0 MHz	FM 106.0 MHz	FM 106.0 MHz	FM 106.0 MHz	FM 106.0 MHz
14	FM 76.0 MHz	AM 530 kHz	AM 530 kHz	AM 531 kHz	AM 531 kHz
15	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	LW 153 kHz	FM 87.5 MHz
16	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
17	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
18	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
19	AM 990 kHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
20	FM 89.1 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz

CIRCUIT DESCRIPTION

Pin Connection



## CIRCUIT DESCRIPTION

## Pin Description

No.	Pin Name	Name	I/O	Description
1	FIP6	7G	O	FL grid 7
2	FIP5	6G	O	FL grid 6
3	FIP4	5G	O	FL grid 5
4	FIP3	4G	O	FL grid 4
5	FIP2	3G	O	FL grid 3
6	FIP1	2G	O	FL grid 2
7	FIP0	1G	O	FL grid 1
8	VDD			Power supply terminal for microcomputer
9	P27	AF key	I	AF key input port
10	P26	DISPLAY key	I	Display key input port
11	P25	POWER key	I	Power keyb input port
12	P24	PTY key	I	PTY key input port
13	P23	PTY search key	I	PTY search key input port
14	P22	UP key	I	Up key input port
15	P21	DOWN key	I	Down key input port
16	P20	BAND key	I	Band key input port
17	RESET	RESET		Microcomputer reset terminal
18	P74	CE	I	Chip enable detection terminal
19	P73	AUTO key	I	Auto key input port
20	AVSS			GND terminal for A/D converter
21	P17	INISW7	I	Destination switch 0 input port L:Japan, H:Other
22	P16	INISW6	I	Destination switch 2 input port L: AM WIDE, H:AM NARROW
23	P15	INISW5	I	Destination switch 3 input port L: Without LW, H: With LW
24	P14	INISW4	I	Destination switch 4 input port L: Without RDS, H: With RDS
25	P13	INISW3	I	Destination switch 1 input port (Channel space) L: FM 100kHz, AM 10kHz, H: FM 50 kHz, AM 9 kHz
26	P12			Not used.
27	P11	POWER	O	Power supply port for peripheral circuit
28	ANI0	SGLEVL	I	Signal level A/D input port for RDS
29	AVDD			Power supply terminal for A/D converter
30	AVREF			Reference voltage input terminal for A/D converter
31	P04			Not used. (GND)
32	XT2			Not used. (Open)
33	VSS			GND terminal for microcomputer
34	X1			Oscillator connection terminal for system clock
35	X2			Oscillator connection terminal for system clock
36	P37	MUTE	O	Mute signal output terminal
37	P36	PIFCNT	O	PLL IF count data input terminal
38	P35	PLLCE	O	PLL CE output terminal
39	P34	PLLDAT	O	PLL data output terminal

## CIRCUIT DESCRIPTION

No.	Pin Name	Name	I/O	Description
40	P33	PLLCLK	O	PLL clock output terminal
41	P32	SDATA	I/O	Serial communication data signal input/output terminal
42	P31	SBUSY	I/O	Serial communication busy signal input/output terminal
43	P30	DDATA	I	Data input terminal for RDS synchronization microcomputer
44	P03	DCLOCK	I	Clock input terminal for RDS synchronization microcomputer
45	P02	DSTART	I	Start input terminal for RDS synchronization microcomputer
46	P01	RDSRESET	O	Reset output terminal for RDS synchronization microcomputer
47	P00			Not used
48	IC			Connected to Vss
49	P72			Not used
50	P71			Not used
51	P70	ATT	O	Attenuater control port H: ATT ON (RF DISTANCE) L: ATT OFF (RF DIRECT)
52	VDD			Power supply terminal for microcomputer
53				Not used
54	P126	STEREO	I	Stereo signal input terminal L: STEREO
55	P125	SD	I	SD signal input terminal L: TUNED ON
56	P124			Not used
57	P123			Not used
58	P122			Not used
59	P121			Not used
60	P120			Not used
61	FIP25	m	O	FL segment m
62	FIP24	g	O	FL segment g
63	FIP23	f	O	FL segment f
64	FIP22	h	O	FL segment f
65	FIP21	j	O	FL segment j
66	FIP20	k	O	FL segment k
67	FIP19	b	O	FL segment b
68	FIP18	a	O	FL segment a
69	FIP17	n	O	FL segment n
70	FIP16	c	O	FL segment c
71	VLOAD			- 30V terminal for FL
72	FIP15	p	O	FL segment p
73	FIP14	r	O	FL segment r
74	FIP13	e	O	FL segment e
75	FIP12	d	O	FL segment d
76	FIP11	s	O	FL segment s
77	FIP10	t	O	FL segment t
78	FIP9			Not used
79	FIP8	9G	O	FL grid 9
80	FIP7	8G	O	FL grid 8



## CIRCUIT DESCRIPTION

16 bit Serial test code (C 2 XXH) ~XG-NEW AMP (SAA 403)~

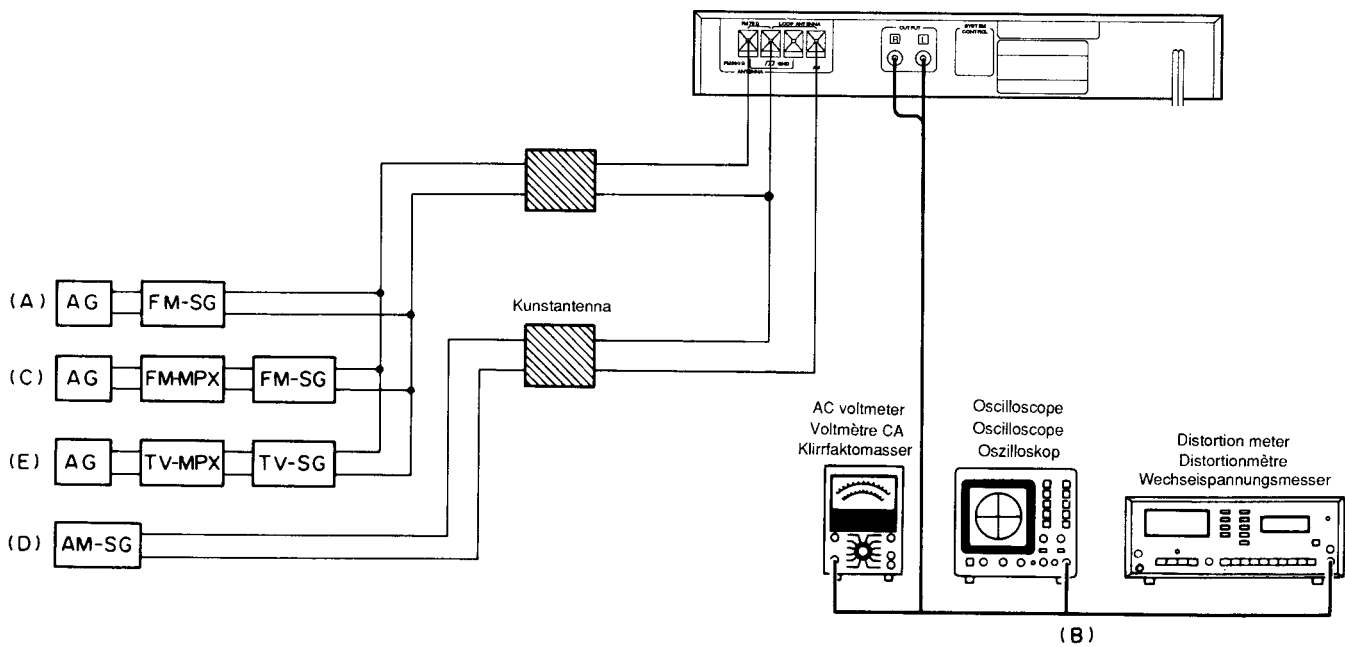
TYPE FUNC	AMP										TUNER					
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	POWER OFF	CD DIRECT OFF	SP B OFF	DUAL SOUND LEVEL 1	NB OFF				POWER OFF	0	MEMORY (ENTER)					
1	POWER ON	CD DIRECT ON	SP B ON	DUAL SOUND LEVEL 2	OMNI SP ON				POWER ON	1	MAIN					
2	PHONO	CD REC OFF	HIT MASTER OFF	DUAL SOUND LEVEL 3					MUTE OFF	2	SUB					
3	CD	CD REC ON	HIT MASTER ON	DUAL SOUND INPUT CD					MUTE ON	3	BOTH					
4	TUNER	SOURCE DIRECT OFF	MOTOR VOL UP	DUAL SOUND INPUT TUNER					AUTO STEREO	4						
5	TAPE 1 (TAPE A)	SOURCE DIRECT ON	MOTOR VOL DOWN	DUAL SOUND INPUT TAPE					MONO	5						
6	TAPE 2 (TAPE B)	LINE STRAIGHT OFF	MOTOR VOL STOP	DUAL SOUND INPUT MD/DAT					TUNED OFF	6						
7	AUX	LINE STRAIGHT ON	DBS/TV	DUAL SOUND INPUT VIDEO					TUNED ON	7						
8	DAT	LOUDNESS OFF	TAPE 2 MONITOR OFF	DUAL SOUND INPUT AV/AUX					ACTIVE RECEPTION OFF	8						
9	VIDEO 1 (VIDEO)	LOUDNESS ON	TAPE 2 MONITOR ON	BGM OFF					ACTIVE RECEPTION ON	9						
A	VIDEO 2	SUB SONIC OFF	VIDEO MUTE ON	BGM ON					RF DIRECT	+10						
B	VIDEO 3	SUB SONIC ON	LAC VOL UP	FAN OFF				ALL LIGHT OFF	RF DISTANCE	BAND FM						ALL LIGHT OFF
C	VDP	SUPER WOOFER OFF	LAC VOL DOWN	FAN ON				ALL LIGHT ON	IF WIDE	BAND AM/MW						ALL LIGHT ON
D	MUTE ON	SUPER WOOFER ON	LAC VOL STOP	FAN SPEED LOW				AMP INITIAL	IF NORMAL	BAND TV/LW						TUNER INITIAL
E	SEL MUTE ON	SPEAKER OFF (SP A OFF)	DUAL SOUND OFF	FAN SPEED HIGH				AMP SERIAL TEST OFF	IF NARROW	DOWN						TUNER SERIAL TEST OFF
F	MUTE ALL OFF	SPEAKER ON (SP A ON)	DUAL SOUND ON	NB ON				AMP SERIAL TEST ON	DIRECT	UP						TUNER SERIAL TEST ON

 : Transmission code     : Reception code

ADJUSTMENT

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No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION Unless otherwise specified, the individual switches should be set as following: BAND: FM							
1	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±68.25kHz dev Selector: L or R 60dBμ(Ant input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	



## ADJUSTMENT

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No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b>		<b>BAND: FM</b>					
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 60dB $\mu$ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L3 (X05-)	0V	(a)
					L4 (X05-)	Minimum distortion.	
2	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Pilot: $\pm 7.5$ kHz dev 60dB $\mu$ (ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	
3	SEPARATION	(C) 98.0MHz 1kHz, $\pm 40$ kHz dev Pilot: $\pm 6$ kHz dev Selector: L or R 60dB $\mu$ (ANT input)	(B)	AUTO 98.0MHz	VR3 (X05-)	Minimum crosstalk.	
4	TUNING LEVEL	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 14dB $\mu$ (ANT input) 75 $\Omega$ 18dB $\mu$ (ANT input) 300 $\Omega$	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where FL201 (TUNED) goes ON.	
<b>AM SECTION</b>		<b>BAND: AM(MW)</b>					
(1)	TUNING LEVEL	(D) 1008 kHz 400Hz, 30% mod 26 dB $\mu$ (ANT input)	(B)	1008 kHz	VR2 (X05-)	Adjust VR2 and stop at the point where FL201 (TUNED) goes ON.	

When TUNER PCB (X05-) is disconnected from main unit, connect PCB's GND (ANT shield plate) and main unit chassis using alligator clip. Then, check TUNER PCB.

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## REGLAGE

### T-1001

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
<b>SECTION MF</b> A moins, de spécification contraire, régler les commutateurs respectifs comme suit: <b>BANDE: FM</b>							
1	DISTORSION (STEREO)	(C) 98,0MHz 1kHz, $\pm 68,25$ kHz dév Selecteur: L ou R 60dB $\mu$ (Entrée ANT)	(B)	AUTO 98,0MHz	IFT (W02-)	Distorsion minimale.	

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N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
<b>SECTION MF</b> <b>BANDE: FM</b>							
1	DETECTEUR	(A) 98,0MHz 1kHz, $\pm 75$ kHz dév 60dB $\mu$ (Entrée ANT)	Relier un voltmètre CC entre les TP3 et TP4. (X05-)	AUTO ou MONO 98,0MHz	L3 (X05-)  L4 (X05-)	0V  Distorsion minimale.	(a)
2	DISTORSION (STEREO)	(C) 98,0MHz 1kHz, $\pm 68,25$ kHz dév Signal pilote: $\pm 7,5$ kHz dév 60dB $\mu$ (Entrée ANT)	(B)	AUTO 98,0MHz	IFT (W02-)	Distorsion minimale.	
3	SEPARATION	(C) 98,0MHz 1kHz, $\pm 40$ kHz dév Signal pilote: $\pm 6$ kHz dév Selecteur: L ou R 60dB $\mu$ (Entrée ANT)	(B)	AUTO 98,0MHz	VR3 (X05-)	Diaphonie minimale.	
4	NIVEAU D'ACCORDER	(A) 98,0MHz 1 kHz, $\pm 75$ kHz dév 14dB $\mu$ (Entrée ANT) 75 $\Omega$ 18dB $\mu$ (Entrée ANT) 300 $\Omega$	(B)	AUTO ou MONO 98,0MHz	VR1 (X05-)	Ajuster VR1 arrêter le mouvement de VR1 au moment où le FL201 (TUNED) s'allume.	
<b>SECTION MA</b> <b>BANDE: AM(MW)</b>							
(1)	NIVEAU D'ACCORDER	(D) 1008 kHz 400 Hz, 30% mod 26dB $\mu$ (Entrée ANT)	(B)	1008 kHz	VR2 (X05-)	Ajuster VR2 arrêter le mouvement de VR1 au moment où le FL201 (TUNED) s'allume.	

# ABGLEICH

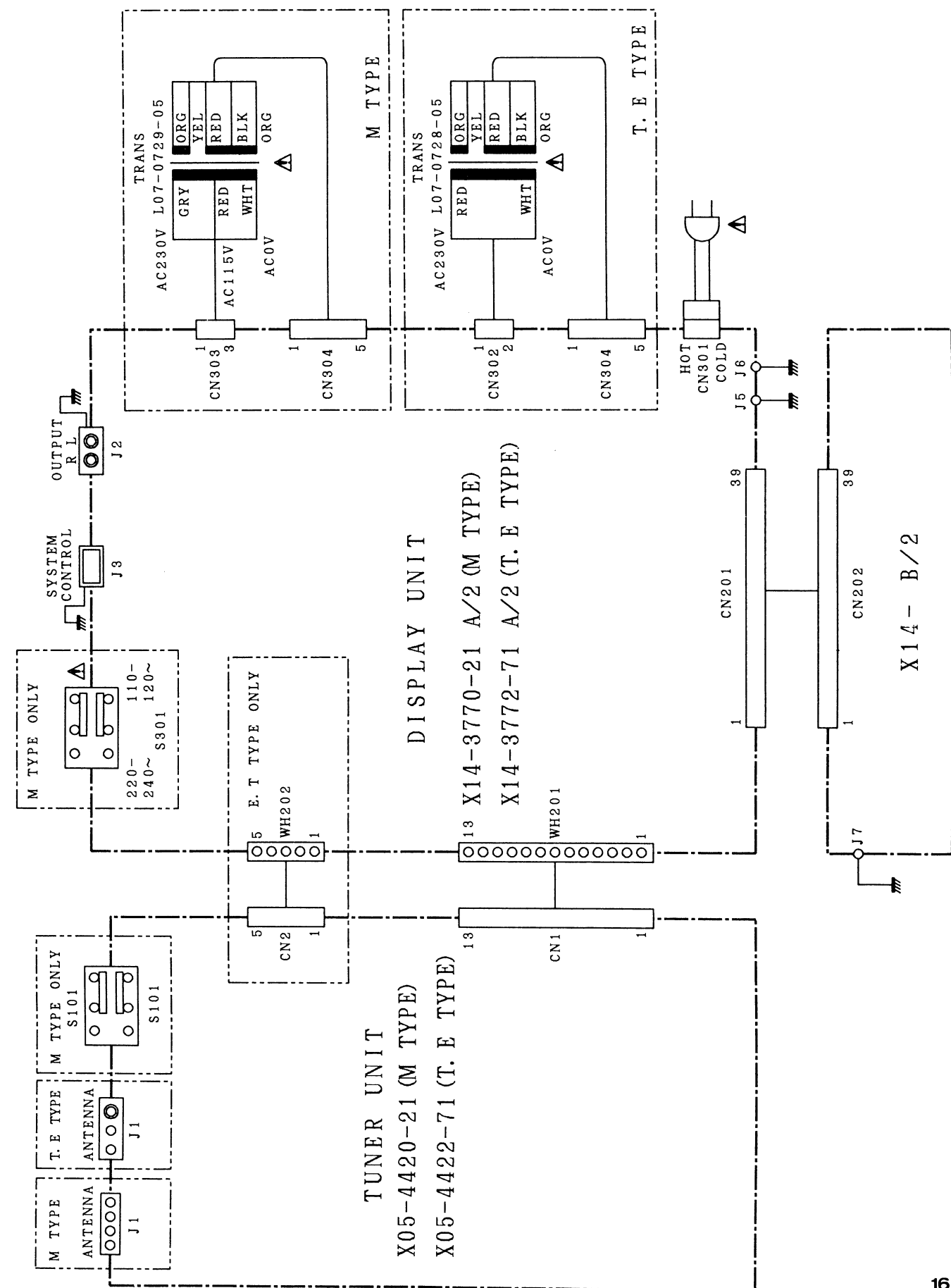
# WHEN REPAIRING

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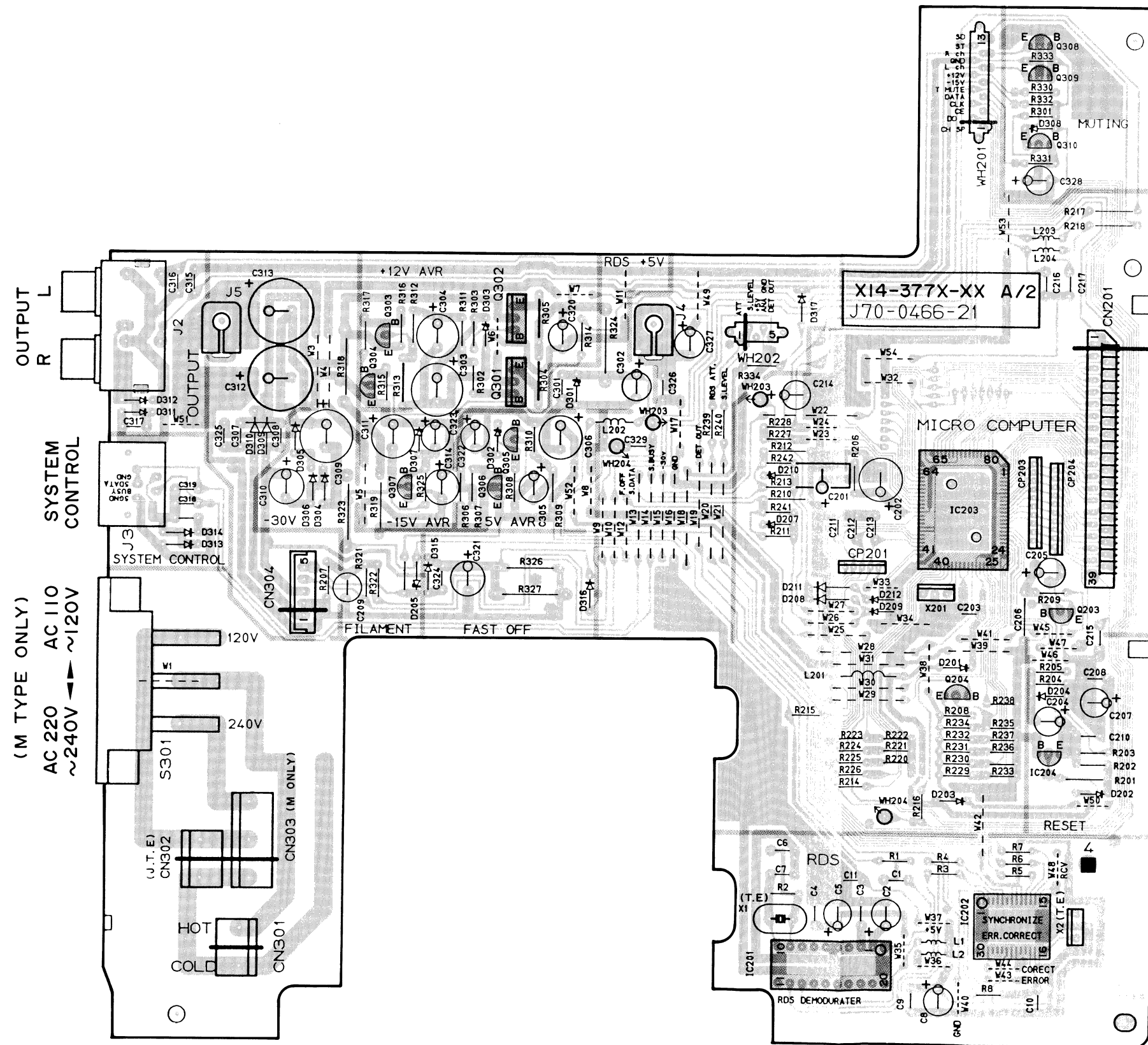
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
<b>UKW-EMPFANGSABTEILUNG</b> Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: <b>BAND: FM</b>							
1	KLIRRFAKTOR (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz Hub Wähler: L oder R 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	IFT (W02-)	Minimal Klirrfaktor.	

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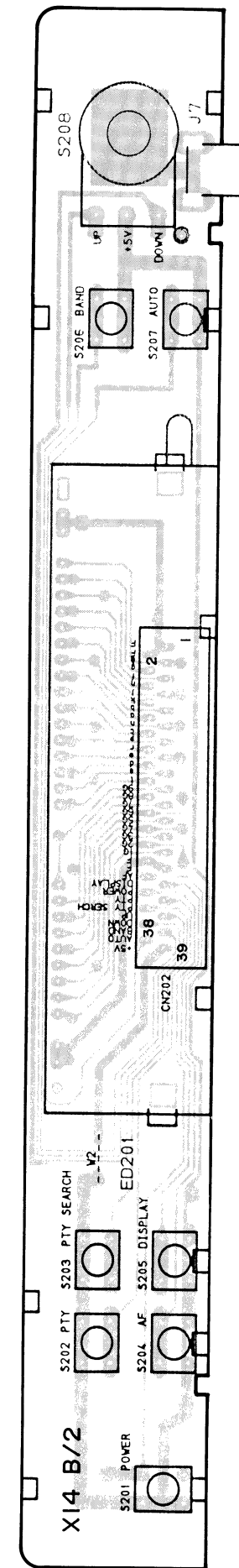
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
<b>UKW-EMPFANGSABTEILUNG</b> <b>BAND: FM</b>							
1	DETEKTOR	(A) 98,0MHz 1kHz, ±75kHz Hub 60dBμ(ANT-Eingang)	Einen Gleichspannungsmesser zwischen TP3 und TP4 anschließen. (X05-)	AUTO oder MONO 98,0MHz	L3 (X05-) L4 (X05-)	0V Minimal Klirrfaktor.	(a)
2	KLIRRFAKTOR (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz Hub Pilotten: ±7,5 kHz Hub 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	IFT (W02-)	Minimal Klirrfaktor.	
3	TRENNUNG	(C) 98,0MHz 1kHz, ±40 kHz Hub Pilotten: ±6 kHz Hub Wähler: L oder R 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	VR3 (X05-)	Optimale Trennung.	
4	ABSTIMM PEGEL	(A) 98,0MHz 1 kHz, ±75 kHz Hub 14dBμ(ANT-Eingang) 75Ω 18 dBμ(ANT-Eingang) 300Ω	(B)	AUTO oder MONO 98,0MHz	VR1 (X05-)	Den Pegel wiederstand aufdrehen, und dem VR1 Halt geben wobei den FL201 (TUNED) anzeiger leuchtet wird.	
<b>MW-EMPFANGSABTEILUNG</b> <b>BAND: AM(MW)</b>							
(1)	ABSTIMM PEGEL	(D) 1008 kHz 400 Hz, 30% mod 26dBμ(ANT-Eingang)	(B)	1008 kHz	VR2 (X05-)	Den Pegel wiederstand aufdrehen, und dem VR2 Halt geben wobei den FL201 (TUNED) anzeiger leuchtet wird.	

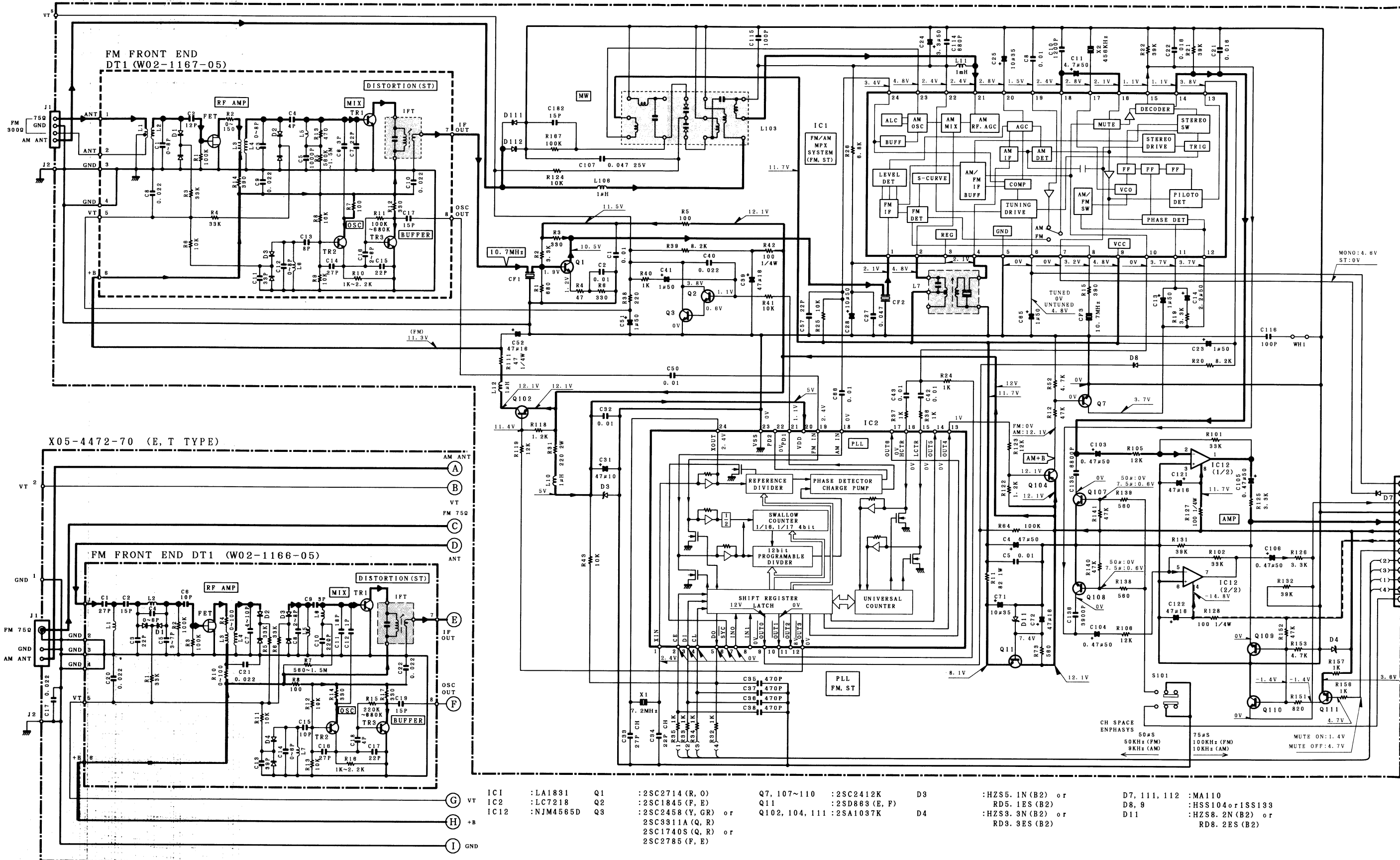


# PC BOARD (Component side view)



Refer to the schematic diagram for the values of resistors and capacitors.

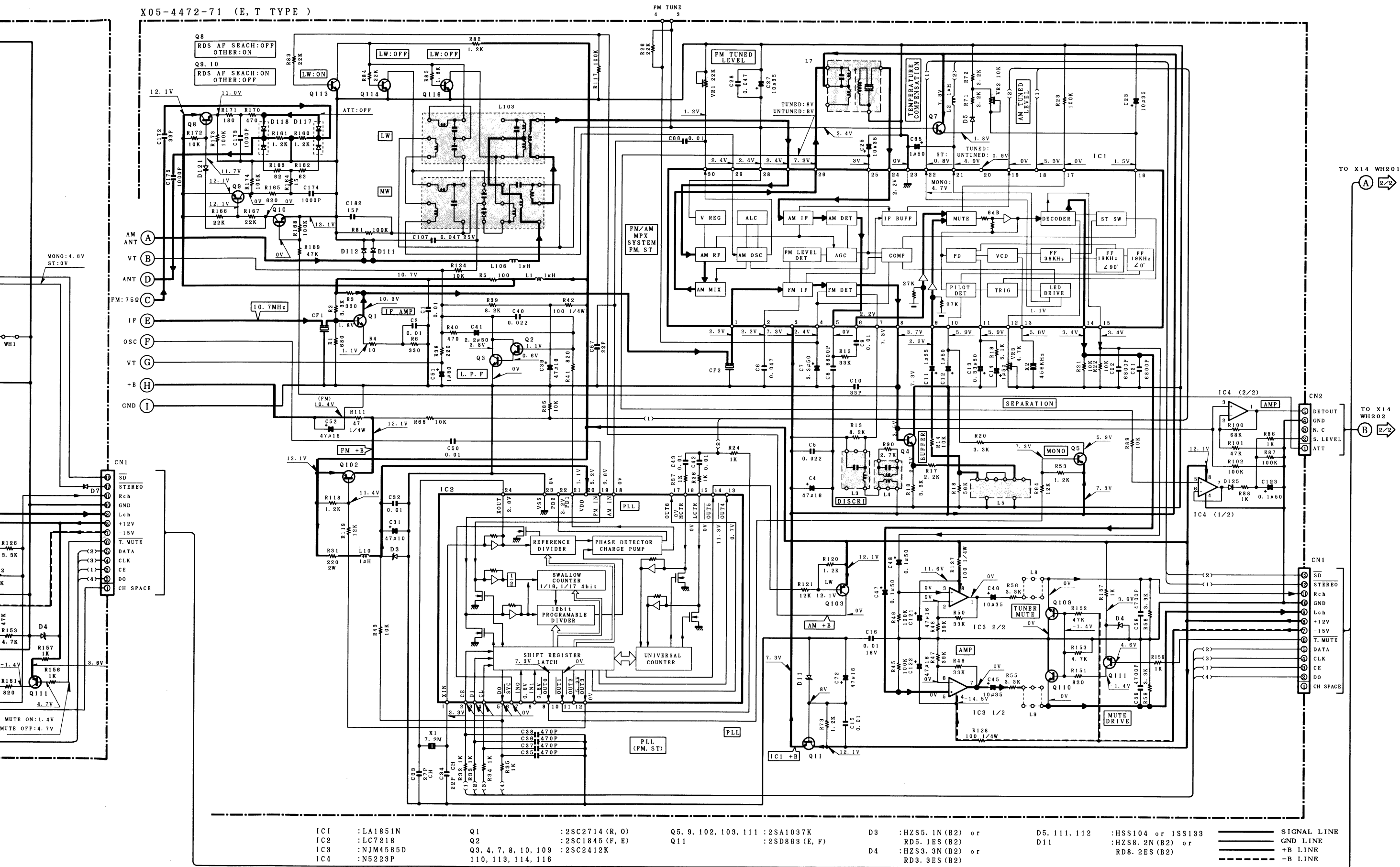




AM ANT (A)  
 VT (B)  
 ANT (C)  
 IF (E)  
 OSC (F)  
 VT (G)  
 +B (H)  
 GND (I)

CN1  
 SD  
 STEREO  
 Rch  
 GND  
 Lch  
 +12V  
 -15V  
 T. MUTE  
 DATA  
 CLK  
 CE  
 DO  
 CH SPACE

DC voltages are a during reception of of 60 dB at the AF variations between parentheses are as signal (with a signal)



DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

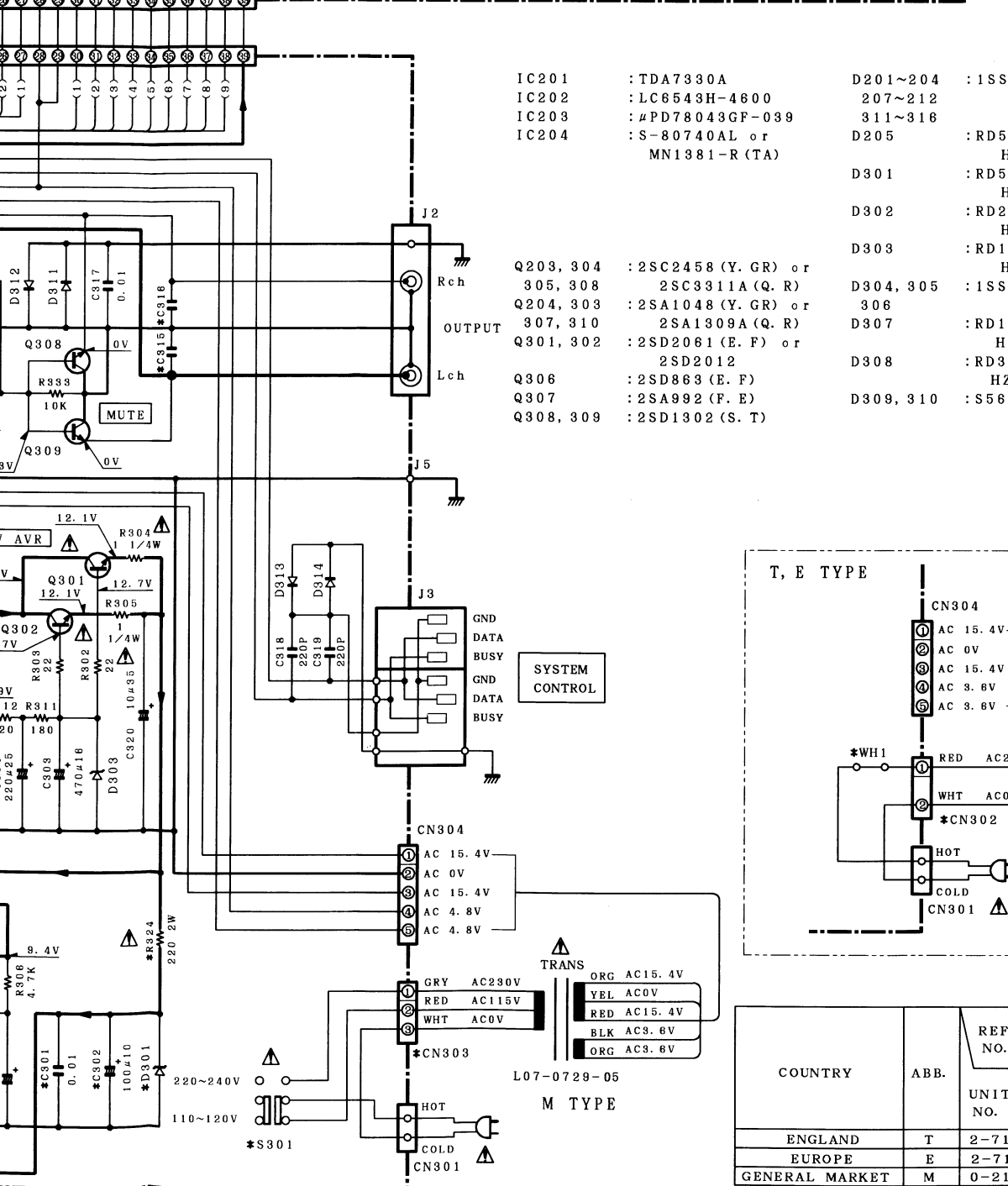
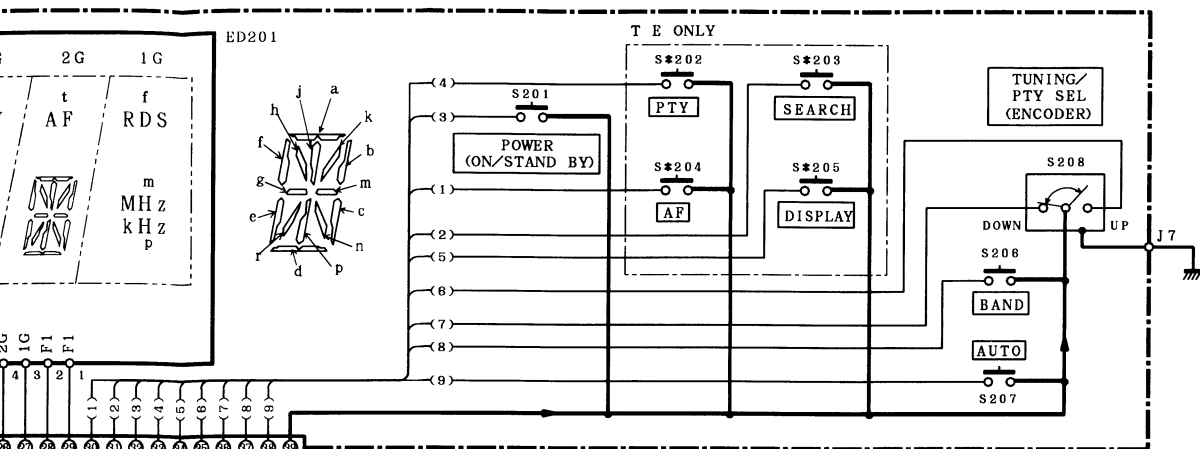
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM (avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.







- IC201 :TDA7330A

IC202 :LC6543H-4600

IC203 :μPD78043GF-039

IC204 :S-80740AL or MN1381-R (TA)
- D201~204 :1SS133 or HSS104

207~212

311~316

D205 :RD5.6ES (B2) or HZS5.6N (B2)

D301 :RD5.1ES (B2) or HZS5.1N (B2)

D302 :RD2.7ES (B2) or HZS2.7N (B2)

D303 :RD13ES (B2) or HZS13N (B2)

D304, 305 :1SS131 or HSS104A

306

D307 :RD16ES (B2) or HZS16N (B2)

D308 :RD3.3ES (B2) or HZS3.3N (B2)

D309, 310 :S5688B or 1SR139-100
- Q203, 304 :2SC2458 (Y. GR) or 305, 308 2SC3311A (Q. R)

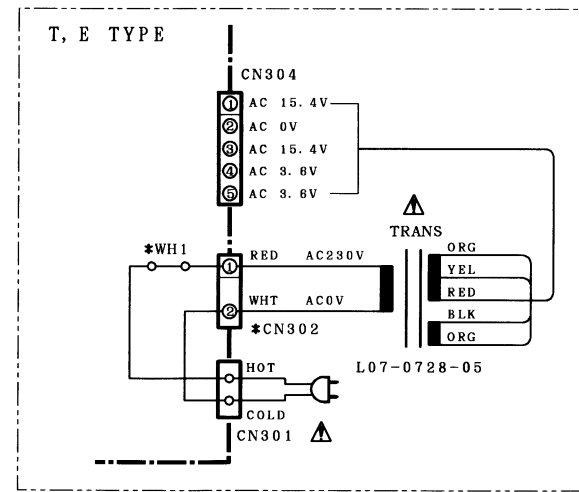
Q204, 303 :2SA1048 (Y. GR) or 307, 310 2SA1309A (Q. R)

Q301, 302 :2SD2061 (E. F) or 2SD2012

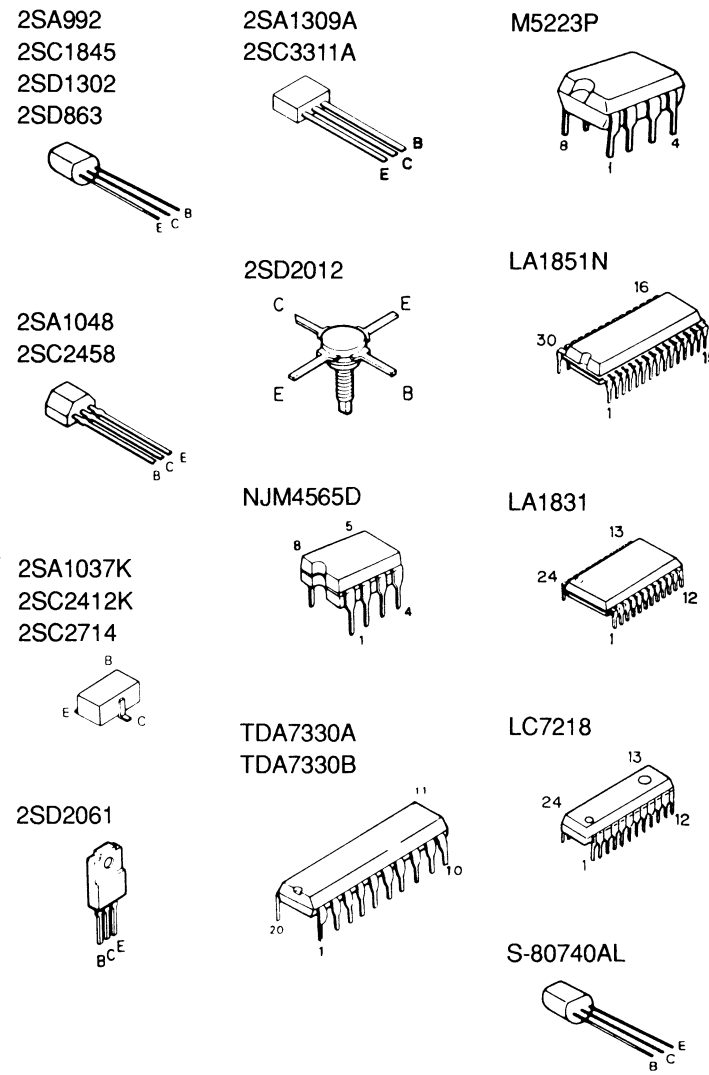
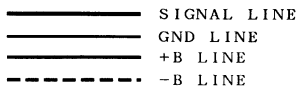
Q306 :2SD863 (E. F)


Q307 :2SA992 (F. E)

Q308, 309 :2SD1302 (S. T)



COUNTRY	ABB.	REF. NO.	UNIT NO.	C315 C316	R229 R230 R236 R237 R235	R231 R232 R234	RDS		W1	Q204, W17 R208, 216 S301, WH203	C217 C329
							IC201, 202 D301 L1, 2, 202 S202~S205 X1, X2	R1~8, 215 R239, R240, R324 C1~11 C211~213 C301, 302 WH202			
ENGLAND	T	2-71	220P	NO	1K		YES		YES	NO	NO
EUROPE	E	2-71	220P	NO	10K		YES		YES	NO	NO
GENERAL MARKET	M	0-21	NO	10K	NO		NO		NO	YES	0.01



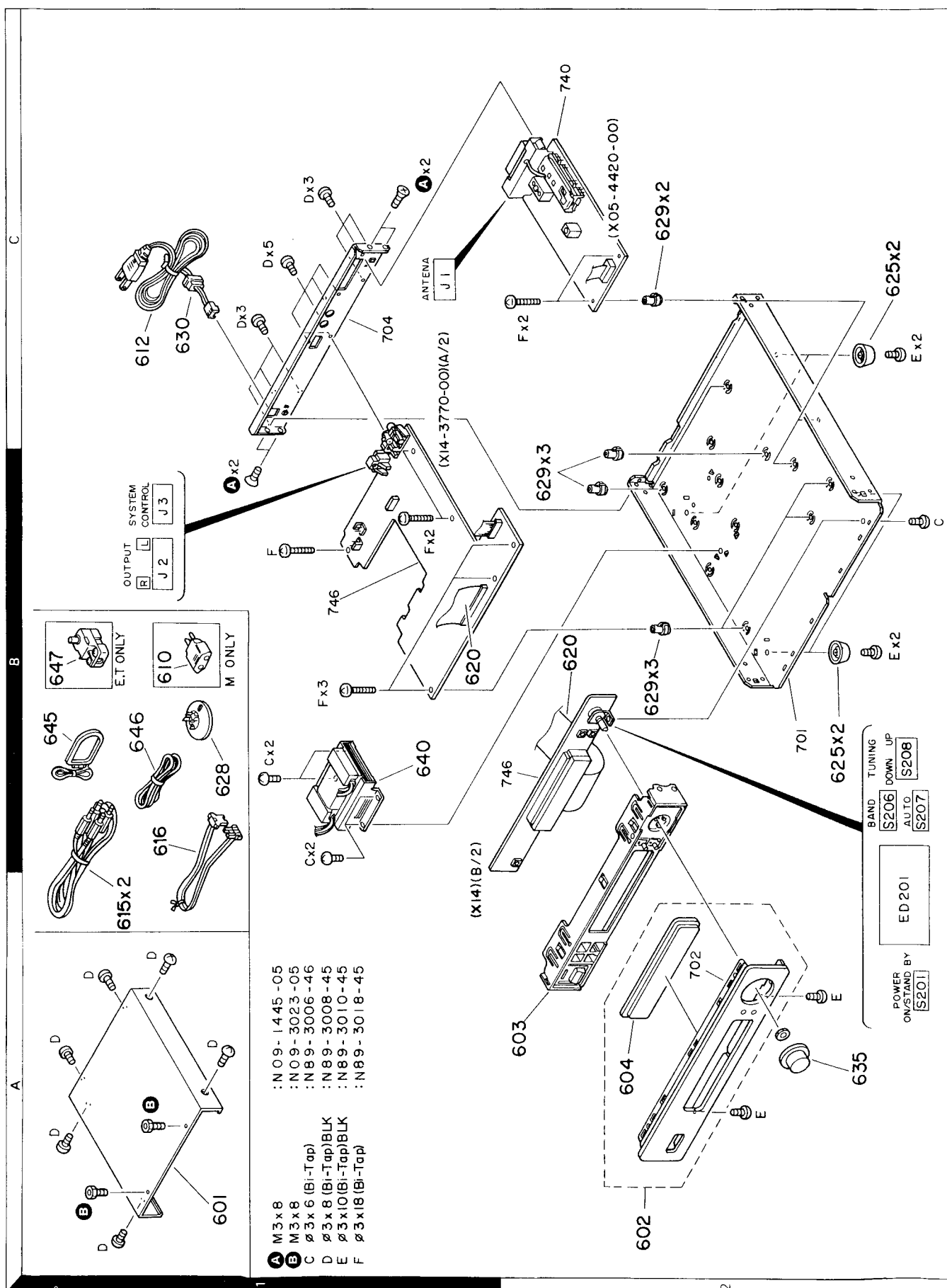
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM (avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u. U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

## EXPLODED VIEW



Parts with the exploded numbers larger than 700 are not supplied.

TUNER UNIT

Unit No.	Destination
X05-4420-21	M
X05-4422-71	T, E

DISPLAY UNIT

Unit No.	Destination
X14-3770-21	M
X14-3772-71	T

※ New Parts  
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Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

No1

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
T-1001 (UNIT)						
601	1A	*	A01-3046-01	METALLIC CABINET	M	
602	2A	*	A60-0429-03	PANEL ASSY	TE	
603	2A	*	A60-0462-03	PANEL ASSY	M	
603	2A	*	A22-1639-12	SUB PANEL	TE	
603	2A	*	A22-1653-12	SUB PANEL		
604	2A	*	B10-1980-04	FRONT GLASS	TE	
-	-	*	B46-0310-03	WARRANTY CARD		
-	-	*	B60-1316-00	INSTRUCTION MANUAL (ENGLISH)	E	
-	-	*	B60-1317-00	INSTRUCTION MANUAL (F.G.D.I)	ME	
-	-	*	B60-1318-00	INSTRUCTION MANUAL (SPANISH)		
-	-	*	B60-1319-00	INSTRUCTION MANUAL (CHINESE)	M	
610	1B		E03-0115-05	AC PLUG ADAPTER	M	
612	1C		E30-2592-15	AC POWER CORD	ME	
612	1C		E30-2602-05	AC POWER CORD	T	
615	1A		E30-2600-05	CORD WITH PLUG	TE	
616	1B		E30-2628-05	CORD WITH CONNECTOR		
620	1B, 2B		E35-0133-05	FLAT CABLE X14(CN201)-(CN202)		
-	-	*	H50-0696-04	ITEM CARTON CASE	M	
-	-	*	H50-0845-04	ITEM CARTON CASE	T	
-	-	*	H50-0846-04	ITEM CARTON CASE	TE	
-	-	*	H10-5532-02	POLYSTYRENE FOAMED FIXTURE		
-	-	*	H10-5533-02	POLYSTYRENE FOAMED FIXTURE		
-	-	*	H12-2172-04	PACKING FIXTURE	T	
-	-	*	H25-0232-04	PROTECTION BAG (235X350X0.03)	ME	
-	-	*	H25-0397-04	PROTECTION BAG	ME	
-	-	*	H25-0432-24	PROTECTION BAG	ME	
-	-	*	H25-0644-04	PROTECTION BAG (0632 PRINTED)	T	
-	-	*	H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-	-	*	H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
625	2B, 2C		J02-0127-05	FOOT		
628	1B		J19-2915-04	ANTENNA HOLDER		
629	2B, 2C	*	J19-3609-04	UNIT HOLDER		
630	1C		J42-0083-05	POWER CORD BUSHING		
635	2A	*	K29-5756-04	KNOB		
640	1B	*	L07-0728-05	POWER TRANSFORMER	TE	
640	1B	*	L07-0729-05	POWER TRANSFORMER	M	
A	1B, 1C		N09-1445-05	SET SCREW (M3X8)		
B	1A	*	N09-3023-05	MACHINE SCREW (3 X 8)		
C	1B		N89-3006-46	BINDING HEAD TAPITE SCREW		
D	1A, 1C		N89-3008-45	BINDING HEAD TAPITE SCREW		
E	2B, 2C		N89-3010-45	BINDING HEAD TAPITE SCREW		
F	1B	*	N89-3018-46	BINDING HEAD TAPITE SCREW		
645	1B		T90-0173-05	L00P ANTENNA		
645	1B		T90-0174-05	L00P ANTENNA		
646	1B		T90-0176-05	T TYPE ANTENNA		
647	1B		T90-0185-05	ANTENNA ADAPTOR	TE	
TUNER UNIT (X05-442X-XX)						
C1	.2		CK73FB1H103K	CHIP C	0.010UF	K
C4			CE04KW1A470M	ELECTRO	47UF	10V
L:Scandinavia K:USA P:Canada						
Y:PX(Far East, Hawaii) T:England E:Europe						
Y:AAFE(Europe) X:Australia M:Other Areas						

⚠ indicates safety critical components

PARTS LIST

✱ New Parts  
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Teile ohne Parts No. werden nicht geliefert.

No.3						
Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
W48			R92-0670-05	CHIP R 0 0HM	M	
S101			S62-0034-05	SLIDE SWITCH DE EMPHASIS	M	
D3			HZS5-1N(B2)	ZENER DIODE	M	
D3			R05-1ES(B2)	ZENER DIODE	M	
D4			HZS3-3N(B2)	ZENER DIODE	M	
D4			RD3-3ES(B2)	ZENER DIODE	M	
D7			MA110	DIODE	M	
D8 , 9			HSS104	DIODE	M	
D8 , 9			ISS133	DIODE	M	
D11			HZS8-2N(B2)	ZENER DIODE	M	
D11			RD8-2ES(B2)	ZENER DIODE	M	
D111,112			MA110	DIODE	M	
IC1			LA1831	IC(AM/FM TUNER)	M	
IC2			LC7218	IC(PLL SYNTHESIZER)	M	
IC12			NJM4565D	IC(OP AMP X2)	M	
Q1			2SC2714(R, Ø)	TRANSISTOR	M	
Q2			2SC1845(F, E)	TRANSISTOR	M	
Q3			2SC2458(Y, CR)	TRANSISTOR	M	
Q3			2SC3311A(Q, R)	TRANSISTOR	M	
Q7			2SC2412K	TRANSISTOR	M	
Q11			2SD683(E, F)	TRANSISTOR	M	
Q102			2SA1037K	TRANSISTOR	M	
Q104			2SA1037K	TRANSISTOR	M	
Q107-110			2SC2412K	TRANSISTOR	M	
Q111			2SA1037K	TRANSISTOR	M	
DT1			W02-1167-05	FM FRONT-END ASSY	M	
TUNER UNIT (X05-444X-XX)						
C1 , 2			CK73FB1H103K	CHIP C 0.010UF	TE	
C4			CE04K41C470M	ELECTRØ	TE	
C5			CK73FB1H223K	CHIP C 0.022UF	TE	
C6			CK73FB1E473K	CHIP C 0.047UF	TE	
C7			CE04K41H3R3M	ELECTRØ 3.3UF 50WV	TE	
C8			CK73FB1H682K	CHIP C 6800PF	TE	
C9			CK73FB1H103K	CHIP C 0.010UF	TE	
C10			CK73FSL1H330J	CHIP C 33PF	TE	
C11			CE04K41V100M	ELECTRØ 10UF 35WV	TE	
C12			CE04K41H010M	ELECTRØ 1.0UF 50WV	TE	
C13			CE04K41HR33M	ELECTRØ 0.33UF 50WV	TE	
C14			CE04K41H010M	ELECTRØ 1.0UF 50WV	TE	
C15			CK73FB1H103K	CHIP C 0.010UF	TE	
C16			C91-0769-05	CERAMIC 0.01UF	TE	
C17			CK73FB1H223K	CHIP C 0.022UF	TE	
C21 , 22			CK73FB1H682K	CHIP C 6800PF	TE	
C23			CE04K41V100M	ELECTRØ 10UF 35WV	TE	
C25			CE04K41V100M	ELECTRØ 10UF 35WV	TE	
C27			CE04K41V100M	ELECTRØ 10UF 35WV	TE	
C28			CK73FB1E473K	CHIP C 0.047UF	TE	
C31			CE04K41A470M	ELECTRØ 47UF 10WV	TE	
C32			CK73FB1H103K	CHIP C 0.010UF	TE	
C33			CK73FCH1H270J	CHIP C 27PF	TE	
C34			CK73FCH1H201J	CHIP C 22PF	TE	
C35 -38			CK73FB1H471K	CHIP C 4705PF	TE	

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No.2						
Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部 品 名 / 規 格	Desti- nation 仕 向	Re- marks 備考
C5			CK73FB1H103K	CHIP C 0.010UF	M	
C8			CK73FB1H103K	CHIP C 0.010UF	M	
C10			CK73FB1H122K	CHIP C 1200PF	M	
C11			CE04KW1H47M	ELECTRØ 4.70UF	M	50WV
C13			CE04KW1H010M	ELECTRØ 1.0UF	M	50WV
C14			CE04KW1H2R2M	ELECTRØ 2.2UF	M	50WV
C21 , 22			CF92FV1H163J	MF 0.016UF	M	J
C23			CE04KW1H010M	ELECTRØ 1.0UF	M	50WV
C24			CE04KW1H3R3M	ELECTRØ 3.3UF	M	50WV
C25			CE04KW1V100M	ELECTRØ 10UF	M	35WV
C27			CK73FB1E473K	CHIP C 0.047UF	M	K
C28			CE04KW1V100M	ELECTRØ 10UF	M	35WV
C31			CE04KW1A470M	ELECTRØ 47UF	M	10WV
C32			CK73FB1H103K	CHIP C 0.010UF	M	K
C33			CK73FCH1H270J	CHIP C 27PF	M	J
C34			CK73FCH1H220J	CHIP C 22PF	M	J
C35 -38			CK73FB1H471K	CHIP C 470PF	M	K
C39			CE04KW1C470M	ELECTRØ 47UF	M	16WV
C40			CK73FB1H223K	CHIP C 0.022UF	M	K
C41			CE04KW1H010M	ELECTRØ 1.0UF	M	50WV
C42 , 43			CK73FB1H103K	CHIP C 0.010UF	M	K
C50			C91-0769-05	CERAMIC 0.01UF	M	K
C51			CE04KW1H010M	ELECTRØ 1.0UF	M	50WV
C52			CE04KW1C470M	ELECTRØ 47UF	M	16WV
C57			CK73FSL1H220J	CHIP C 22PF	M	J
C65			CE04KW1H010M	ELECTRØ 1.0UF	M	50WV
C66			CK73FB1H102K	CHIP C 1000PF	M	K
C71			CE04KW1V100M	ELECTRØ 10UF	M	35WV
C72			CE04KW1C470M	ELECTRØ 47UF	M	16WV
C107			CK73FB1E473K	CHIP C 0.047UF	M	K
C112			CK73FSL1H101J	CHIP C 100PF	M	J
C114			CK73FB1H681K	CHIP C 680PF	M	K
C115, 116			CK73FSL1H101J	CHIP C 100PF	M	J
C121, 122			CE04KW1C470M	ELECTRØ 47UF	M	16WV
C135, 136			CF92FV1H682J	MF 6800PF	M	J
C182			CK73FSL1H150J	CHIP C 15PF	M	J
J1			E20-0476-05	LOCK TERMINAL BOARD ANTENNA	M	
CF1 , 2			L72-0531-05	CERAMIC FILTER	M	
CF3			L72-0574-05	CERAMIC FILTER	M	
L7			L30-0467-05	AM IFT	M	
L10			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
L11			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)	M	
L12			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
L103			L39-1309-05	COMBINATION COIL	M	
L106			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHZ)	M	
X2			L78-0295-05	RESONATOR (19KHZ)	M	
R11			RS14KB3A820J	FL-PROOF RS 82 J 1W	M	
R31			RS14KB3D221J	FL-PROOF RS 220 J 2W	M	
R42			RD14NB2E101J	RD 100 J 1/4W	M	
R111			RD14NB2E470J	RD 47 J 1/4W	M	
R127, 128			RD14NB2E101J	RD 100 J 1/4W	M	
W46			R92-0670-05	CHIP R 0 0HM	M	

L:Scandinavia K:USA P:Canada  
Y:PX(Far East, Hawaii) T:England E:Europe  
Y:AAFE(S)(Europe) X:Australia M:Other Areas

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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	No5
D125		MA110	DIODE	TE	
IC1		LA185IN	IC(CAM, FM TUNER)	TE	
IC2		IC(PLL SYNTHESIZER)		TE	
IC3		NJ4565D	IC(OP AMP X2)	TE	
IC4		MS223P	IC(OP AMP X2)	TE	
Q1		2SC2714(R,Θ)	TRANSISTOR	TE	
Q2		2SC1845(F,E)	TRANSISTOR	TE	
Q3	.4	2SC2412K	TRANSISTOR	TE	
Q5		2SA1037K	TRANSISTOR	TE	
Q7	.8	2SC2412K	TRANSISTOR	TE	
Q9		2SA1037K	TRANSISTOR	TE	
Q10		2SC2412K	TRANSISTOR	TE	
Q11		2SD863(E,F)	TRANSISTOR	TE	
Q102, 103		2SA1037K	TRANSISTOR	TE	
Q109, 110		2SC2412K	TRANSISTOR	TE	
Q111		2SA1037K	TRANSISTOR	TE	
Q113, 114		2SC2412K	TRANSISTOR	TE	
Q116		2SC2412K	TRANSISTOR	TE	
DT1		FM FRONT-END ASSY		TE	
DISPLAY UNIT (X14-377X-XX)					
C1		CC45FSLH271J	CERAMIC	TE	
C2		CE04KW1V100M	ELECTRØ	J	
C3	.4	CK45FFIH103Z	CERAMIC	35WV	
C5		CE04KW1V100M	ELECTRØ	0.010UF Z	
C6	.7	CC45FCHI270J	CERAMIC	10UF	
C8		CE04KW1V100M	ELECTRØ	27PF J	
C9	-11	CK45FFIH103Z	CERAMIC	10UF	
C201		C90-1826-05	BACKUP	0.010UF Z	
C202		CE04KWJ471M	ELECTRØ	0.047F	
C203		CK45FFIH223Z	CERAMIC	470UF 6.3WV	
C204, 205		CE04KW1H010M	ELECTRØ	0.022UF Z	
C206		C91-0769-05	ELECTRØ	1.0UF 50WV	
C207		CE04KW1H010M	CERAMIC	0.01UF K	
C208		CK45FFIH103Z	ELECTRØ	1.0UF 50WV	
C209		C90-1332-05	NP-ELEC	0.010UF Z	
C210		CK45FFIH103Z	CERAMIC	10UF 25WV	
C211-213		CC45FSLH221J	CERAMIC	0.010UF Z	
C215		CK45FFIH103Z	CERAMIC	220PF J	
C217		CK45FFIH103Z	CERAMIC	0.010UF Z	
C301		CK45FFIH103Z	CERAMIC	0.010UF Z	
C302		CE04KW1A101M	ELECTRØ	0.010UF Z	
C303		CE04DW1C411M	ELECTRØ	100UF	
C304		CE04KW1E221M	ELECTRØ	470UF 16WV	
C305		CE04KW1H010M	ELECTRØ	220UF 25WV	
C306		CE04KWJ471M	ELECTRØ	1.00UF 50WV	
C307, 308		CK45FFIH103Z	CERAMIC	470UF 6.3WV	
C309	*	CE04DW1H331M	ELECTRØ	0.010UF Z	
C310		CE04KW1E101M	ELECTRØ	330UF 50WV	
C311	*	CE04KW1V470M	ELECTRØ	100UF 25WV	
C312, 313		C90-3519-05	ELECTRØ	47UF 35WV	
C314		CE04KW1B101M	ELECTRØ	1000UF 25WV	
C315, 316		CC45FSLH221J	CERAMIC	100UF 25WV	
C317		CK45FFIH103Z	CERAMIC	220PF J	
C318, 319		CC45FSLH221J	CERAMIC	0.010UF Z	

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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	No4
C39		CE04KW1C470M	ELECTRØ	TE	
C40		C922EM1423J	W/LAR	16WV	
C41		CE04KH1H2R2M	NELEC	J	
C42		CK73FB1H103K	CHIP C	2.020UF	
C43		CE04KW1H103K	CHIP C	0.010UF	
C45, 46		CE04KW1V100M	ELECTRØ	35WV	
C50		C91-0769-05	CERAMIC	0.01UF	
C51		CE04KW1H010M	ELECTRØ	K	
C52		CE04KW1C470M	ELECTRØ	1.0UF	
C57		CK73FCHI220J	CHIP C	47UF	
C58, 59		CK73FB1H472K	CHIP C	22PF J	
C65		CE04KW1H010M	ELECTRØ	4700PF K	
C66		C91-0769-05	CERAMIC	1.0UF	
C72		CE04KW1C470M	ELECTRØ	50WV	
C107		CK73FB1E473K	CHIP C	16WV	
C121, 122		CE04KW1C470M	ELECTRØ	47UF K	
C123		CE04KW1H010M	ELECTRØ	0.047UF	
C172		CK73FSLH330J	CHIP C	16WV	
C173-175		CK73FB1H102K	CHIP C	0.1UF	
C182		CK73FSLH150J	CHIP C	50WV	
J1		E20-0321-05	LOCK TERMINAL BOARD ANTENNA	J	
CF1, 2		L72-0536-05	CERAMIC FILTER	15PF J	
L1, 2		L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
L3		L30-0496-05	FM IFT	TE	
L4		L30-0497-05	FM IFT	TE	
L5		L79-0125-05	LC FILTER	TE	
L7		L30-0467-05	AM IFT	TE	
L8, 9		L79-0790-05	LC FILTER	TE	
L10		L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
L103		L39-1310-05	COMBINATION COIL	TE	
L106		L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
X1		L72-1122-05	CRYSTAL RESONATOR(7.2MHZ)	TE	
X2		L78-0295-05	RESONATOR (19KHZ)	TE	
R31		RS14KB30221J	FL-PROOF RS	220	
R42		R014NB2E101J	RD	J 2W	
R111		R014NB2E470J	RD	100 J 1/4W	
R127, 128		R014NB2E101J	RD	47 J 1/4W	
VR1		R12-3686-05	TRIMMING POT.(22K) FM LEVEL	TE	
VR2		R12-3685-05	TRIMMING POT.(10K) AM LEVEL	TE	
WR3		R12-1619-05	TRIMMING POT.(4.7K) SEPARATION	TE	
W100-103		R92-0670-05	CHIP R	0 0HM	
W200-211		R92-0679-05	CHIP R	0 0HM	
D3		HZ55.1N(B2)	ZENER DIODE	TE	
D4		RD5.1ES(B2)	ZENER DIODE	TE	
D3		HZ53.3N(B2)	ZENER DIODE	TE	
D4		RD3.3ES(B2)	ZENER DIODE	TE	
D5		HSS104	ZENER DIODE	TE	
D5		1SS133	DIODE	TE	
D11		HZ58.2N(B2)	DIODE	TE	
D11		RD8.2ES(B2)	ZENER DIODE	TE	
D11, 112		HSS104	ZENER DIODE	TE	
D111, 112		1SS133	DIODE	TE	
D117, 118		1SS268	DIODE	TE	
D121		MA110	DIODE	TE	

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No6

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C320		CE04KM1V100M	ELECTRØ 100F 35WV		
C321		CE04KM1E101M	ELECTRØ 1000F 25WV		
C322		CE04KM1V4R7M	ELECTRØ 4.7UF 35WV		
C323		CE04KM1V100M	ELECTRØ 100F 35WV	TE	
C324-326		CK45FF1H103Z	CERAMIC 0.010UF Z		
C324, 325		CK45FF1H103Z	CERAMIC 0.010UF Z		
C327		CE04KM1V4R7M	ELECTRØ 4.7UF 35WV	M	
C328		CE04KM1H010M	ELECTRØ 1.0UF 50WV		
C329		CK45FF1H103Z	CERAMIC 0.010UF Z	M	
CN201	18	E40-4179-05	FLAT CABLE CONNECTØR		
CN202	2B	E40-4219-05	FLAT CABLE CONNECTØR		
J2		E43-0103-05	PHONØ JACK OUTPUT		
J3	*	E08-0311-05	RECTANGULAR RECEPTACLE SYNCHRO		
L1, 2		L40-1001-17	SMALL FIXED INDUCTØR(10UH, K)	TE	
L201		L40-1091-17	SMALL FIXED INDUCTØR(1UH)	M	
L201-204		L40-1091-17	SMALL FIXED INDUCTØR(1UH)	TE	
L203, 204		L40-1091-17	SMALL FIXED INDUCTØR(1UH)	M	
X1		L77-2002-05	CRYSTAL RESONATOR(4.332MHZ)	TE	
X2		L78-0503-05	RESONATOR (4.00MHZ)	TE	
X201		L78-0267-05	RESONATOR (4.194MHZ)		
CP201		R90-0487-05	MULTI-COMP 47KX4 J 1/6W		
CP203		R90-0493-05	MULTI-COMP 100KX9 J 1/6W		
CP204		R90-0911-05	MULTI-COMP 1000PF 9 M		
R304, 305	*	RD14GB2E1R0J	FL-PRØØF RD 1.0 J 1/4W		
R313		RD14GB2E102J	FL-PRØØF RD 1.0K J 1/4W		
R318		RS14DB3D121J	FL-PRØØF RS 120 J 2W		
R319		RS14DB3A820J	FL-PRØØF RS 82 J 1W		
R323		RS14DB3D471J	FL-PRØØF RS 470 J 2W	TE	
R324		RS14DB3D221J	FL-PRØØF RS 220 J 2W		
R326		RS14DB3A222J	FL-PRØØF RS 2.2K J 1W		
R327		RS14DB3D102J	FL-PRØØF RS 1.0K J 2W		
S201		S40-1064-05	PUSH SWITCH POWER	M	
S201-207		S40-1064-05	PUSH SWITCH POWER, ETC	TE	
S206, 207		S40-1064-05	PUSH SWITCH BAND AUTO	M	
S208		S29-1156-05	ROTARY SWITCH TUNING		
S301		S62-0001-05	SLIDE SWITCH VOLTAGE SELECTØR	M	
D201-204		HSS104	DIØDE		
D201-204		HS133	DIØDE		
D205		HZ55.6N(B2)	ZENER DIØDE		
D205		HS104	ZENER DIØDE		
D207-212		HS133	DIØDE		
D301		HZ55.1S(B2)	ZENER DIØDE	TE	
D301		R05.1JS(B2)	ZENER DIØDE	TE	
D302		HZ52.7N(B2)	ZENER DIØDE		
D302		R02.7ES(B2)	ZENER DIØDE		
D303		HZ513N(B2)	ZENER DIØDE		
D303		R013ES(B2)	ZENER DIØDE		
D304-306		HS104A	DIØDE		
D304-306		HS131	DIØDE		
D307		HZ516N(B2)	ZENER DIØDE		
D307		RD16ES(B2)	ZENER DIØDE		
D308		HZ53.3N(B2)	ZENER DIØDE		

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No7

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D308		RD3.3ES(B2)	ZENER DIØDE		
D309, 310		SS688B	DIØDE		
D309, 310		LSR139-100	DIØDE		
D311-317		HS104	DIØDE		
D311-317		LS133	DIØDE		
ED201	*	CM1224C	INDICATOR TUBE		
IC201		TAØ7330A	IC(RDS DEMØDULATOR)	TE	
IC201	*	TAØ7330B	IC(RDS DEMØDULATOR)	TE	
IC202		LC6543H-4600	IC	TE	
IC203	*	UPD78043CF-039	IC		
IC204		MN1381-R(TA)	IC(VOLTAGE DETECT)		
IC204		S-80740AL	IC(VOLTAGE DETECTOR)		
Q203		2SC2458(Y, GR)	TRANSISTØR		
Q203		2SC311A(Q, R)	TRANSISTØR	M	
Q204		2SA1048(Y, GR)	TRANSISTØR		
Q204		2SA1309A(Q, R)	TRANSISTØR	M	
Q301, 302		2SD2012	TRANSISTØR		
Q301, 302		2SD2061(E, F)	TRANSISTØR		
Q303		2SA1308(Y, GR)	TRANSISTØR		
Q303		2SA1309A(Q, R)	TRANSISTØR		
Q304, 305		2SC2458(Y, GR)	TRANSISTØR		
Q304, 305		2SC311A(Q, R)	TRANSISTØR		
Q306		2SD863(E, F)	TRANSISTØR		
Q307		2SA992(E, F)	TRANSISTØR		
Q308, 309		2SD1302(S, T)	TRANSISTØR		
Q310		2SA1048(Y, GR)	TRANSISTØR		
Q310		2SA1309A(Q, R)	TRANSISTØR		

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T-1001/L

## PARTS LIST

# T-1001/L

## SPECIFICATIONS

<b>T-1001</b>		<b>T-1001/L</b>	
<b>FM tuner section</b>		<b>FM tuner section</b>	
Tuning frequency range .....		87.5 MHz ~ 108 MHz	
Usable sensitivity (MONO at 75 Ω) .....		1.2 μV / 13.2 dBf	
Signal to noise ratio (at 1 kHz)			
MONO .....		75 dB (65 dBf input)	
STEREO .....		68 dB (65 dBf input)	
Stereo separation			
1 kHz .....		40 dB	
Selectivity (±400 kHz) .....		50 dB	
Frequency response (30 Hz ~ 15 kHz) .....		+0.5 dB, -3.0 dB	
Output level / impedance			
(at 1 kHz, 75 kHz dev) .....		600 mV / 3.3 kΩ	
<b>AM tuner section</b>		<b>MW tuner section</b>	
Tuning frequency range		531 kHz ~ 1,602 kHz	
9 kHz step .....		531 kHz ~ 1,602 kHz	
10 kHz step .....		530 kHz ~ 1,610 kHz	
Usable sensitivity .....		12 μV / (500 μV/m)	
Signal to noise ratio (at 30 % mod. 1 mV input) .....		48 dB	
Output level / impedance			
(at 30 % mod. 1 mV input) .....		180 mV / 3.3 kΩ	
<b>General</b>		<b>LW tuner section</b>	
Power consumption .....		10W	
Dimensions .....			
W : 270 mm (10 - 5/8")		153 kHz ~ 281 kHz	
H : 60 mm (2 - 3/8")		Usable sensitivity .....	
D : 329 mm (12 - 15/16")		22 μV	
Weight (Net) .....		Signal to noise ratio (at 30 % mod. 1 mV input) .....	
3 kg (6.6 lb)		45 dB	
		Output level / impedance	
		(at 30 % mod. 1 mV input) .....	
		180 mV / 3.3 kΩ	
		<b>General</b>	
		Power consumption .....	
		10 W	
		Dimensions .....	
		W : 270 mm (10 - 5/8")	
		H : 60 mm (2 - 3/8")	
		D : 329 mm (12 - 15/16")	
		Weight (Net) .....	
		3 kg (6.6 lb)	

KENWOOD follows a policy of continuous advancements in development.  
For this reason specifications may be changed without notice.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement.  
Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

KENWOOD strebt ständige Verbesserungen in der Entwicklung an.  
Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

**Note:**

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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